## (FILE 'HOME' ENTERED AT 18:50:47 ON 19 SEP 2008)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,

AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,

CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,

DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 18:51:13 ON 19 SEP 2008

SEA LACTOPEROXIDASE# AND CATION# AND ELUT### AND #####FILTRA###

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0\* FILE ADISCTI

SEA LACTOPEROXIDASE# AND CATION# AND (ELUTE OR ELUTION) AND (FI

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- 2 FILE CABA
- 6 FILE CAPLUS
- 4 FILE IFIPAT
- 1 FILE MEDLINE
- 1 FILE PROMT
- 550 FILE USPATFULL
- 115 FILE USPAT2
- 5 FILE WPIDS
- 5 FILE WPINDEX
- L1 QUE LACTOPEROXIDASE# AND CATION# AND (ELUTE OR ELUTION) AND (FI

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FILE 'CAPLUS, MEDLINE, WPIDS' ENTERED AT 19:04:44 ON 19 SEP 2008

- L2 12 S L1
- L3 10 DUP REM L2 (2 DUPLICATES REMOVED)

FILE 'HOME' ENTERED AT 19:05:12 ON 19 SEP 2008

FILE 'CAPLUS' ENTERED AT 19:13:17 ON 19 SEP 2008

FILE 'CAPLUS, MEDLINE, WPIDS' ENTERED AT 19:13:39 ON 19 SEP 2008

FILE 'CAPLUS' ENTERED AT 19:13:41 ON 19 SEP 2008

L3 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:19741 CAPLUS << LOGINID::20080919>>

DOCUMENT NUMBER: 140:76329

ENTRY DATE: Entered STN: 11 Jan 2004

TITLE: Milk protein isolated by using \*\*\*cation\*\*\*

-exchange resin

INVENTOR(S): Souppe, Jerome

PATENT ASSIGNEE(S): Compagnie Laitiere Europeenne, Fr.

SOURCE: Fr. Demande, 23 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

INT. PATENT CLASSIF.:

MAIN: A23J003-08

SECONDARY: A61K038-00; A61K035-20; A61K038-40; A61P019-00;

A23C009-146

CLASSIFICATION: 17-8 (Food and Feed Chemistry)

Section cross-reference(s): 18, 63

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

Ξ,						
IT, LU, MC, NL, PT, RO, SE, SI, SK, TR						

PRIORITY APPLN. INFO.: FR 2002-8234 A 20020702 WO 2003-FR2015 W 20030630

WO 2003-FR2015 W 20030630 US 2005-519131 A1 20050804

PATENT CLASSIFICATION CODES:

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

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FR 2841747 ICM A23J003-08

ICS A61K038-00; A61K035-20; A61K038-40; A61P019-00; A23C009-146

IPCI A23J0003-08 [ICM,7]; A23J0003-00 [ICM,7,C\*];

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         NCL 426/490.000; 426/580.000; 426/491.000; 426/271.000;
             426/587.000; 426/588.000; 426/590.000; 514/775.000;
             530/416.000
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US 20080044544 IPCI A23C0009-00 [I,A]
         NCL 426/580.000
         ECLA A23C009/146B; A23J001/20; A23J001/20C; A23L001/305D;
             A61K038/17A2; A61K038/40
ABSTRACT:
Milk protein isolates (>90% protein, with high lactoferrin and
***lactoperoxidase*** activity) are isolated from milk or whey by adsorption
on a ***cation*** -exchange column and ***elution*** with a salt soln.,
followed by desalting and sterilization by ***filtration*** techniques.
Thus, skim milk is passed through a SPEC 70 column and proteins adsorbed on the
resin are eluted with 10% NaCl: ***ultrafiltration*** is used to conc. the
proteins and remove the salt; microfiltration is used to sterilize the isolate
(96.2% protein; 54% lactoferrin).
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SUPPL. TERM:
                   milk whey protein isolation ***cation*** exchange;
           lactoferrin ***lactoperoxidase*** isolation milk
            ***cation*** exchange
                     ***Ultrafiltration***
INDEX TERM:
            (desalting by; milk protein isolated by using
              ***cation*** -exchange resin)
INDEX TERM:
                   Osteoblast
             (food supplement for growth stimulation of; milk protein
            isolated by using ***cation*** -exchange resin)
INDEX TERM:
                   Arthritis
           Osteoporosis
           Periodontium, disease
           Rheumatic diseases
             (food supplement for prevention of; milk protein isolated
            by using ***cation*** -exchange resin)
INDEX TERM:
                   Bone, disease
             (fracture, food supplement for prevention of; milk
            protein isolated by using ***cation*** -exchange
            resin)
                     ***Filtration***
INDEX TERM:
             (microfiltration, sterilization by; milk protein isolated
            by using ***cation*** -exchange resin)
                     ***Cation*** exchangers
INDEX TERM:
           Dietary supplements
           Drug delivery systems
           Health food
           Milk
           Whey
             (milk protein isolated by using ***cation*** -exchange
            resin)
INDEX TERM:
                   Lactoferrins
           ROLE: FFD (Food or feed use); PUR (Purification or
           recovery); THU (Therapeutic use); BIOL (Biological study);
           PREP (Preparation); USES (Uses)
            (milk protein isolated by using ***cation*** -exchange
            resin)
INDEX TERM:
                   Proteins
           ROLE: FFD (Food or feed use); PUR (Purification or
           recovery); THU (Therapeutic use); BIOL (Biological study);
           PREP (Preparation); USES (Uses)
            (milk; milk protein isolated by using ***cation***
             -exchange resin)
INDEX TERM:
                   Growth disorders, animal
             (retarded, food supplement for prevention of; milk
            protein isolated by using ***cation*** -exchange
```

resin)

INDEX TERM: 7440-70-2, Calcium, biological studies

ROLE: FFD (Food or feed use); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(food supplement contg.; milk protein isolated by using

\*\*\*cation\*\*\* -exchange resin)

INDEX TERM: 9003-99-0P, \*\*\*Lactoperoxidase\*\*\*

ROLE: FFD (Food or feed use); PUR (Purification or

recovery); THU (Therapeutic use); BIOL (Biological study);

PREP (Preparation); USES (Uses)

(milk protein isolated by using \*\*\*cation\*\*\* -exchange resin)

INDEX TERM: 362594-80-7, SPEC 70

ROLE: NUU (Other use, unclassified); USES (Uses)

(milk protein isolated by using \*\*\*cation\*\*\* -exchange resin)

INDEX TERM: 7447-40-7, Potassium chloride, uses 7647-14-5, Sodium

chloride, uses 7786-30-3, Magnesium chloride, uses

10043-52-4, Calcium chloride, uses

ROLE: NUU (Other use, unclassified); USES (Uses)

(protein \*\*\*elution\*\*\* with; milk protein isolated by

using \*\*\*cation\*\*\* -exchange resin)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS

## RECORD.

REFERENCE(S): (1) Anon; PATENT ABSTRACTS OF JAPAN 1996, V1996(10)

- (2) Anon; PATENT ABSTRACTS OF JAPAN 1997, V1997(11)
- (3) Burling, H; US 5149647 A 1992 CAPLUS
- (4) Campina Melkunie Bv; WO 9313676 A 1993 CAPLUS
- (5) Chiu, C; JOURNAL OF FOOD SCIENCE 1997, V62(5), P996 CAPLUS
- (6) Hahn, R; JOURNAL OF CHROMATOGRAPHY A 1998, V795(2), P277 CAPLUS
- (7) Rhone Poulenc Ind; FR 2443867 A 1980 CAPLUS
- (8) Ronnie, M; US 6096870 A 2000 CAPLUS
- (9) Sepragen Corp; WO 9915024 A 1999 CAPLUS
- (10) Snow Brand Milk Prod Co Ltd; EP 0704218 A 1996 CAPLUS
- (11) Snow Brand Milk Prod Co Ltd; JP 08165249 A 1996 CAPLUS
- (12) Snow Brand Milk Prod Co Ltd; JP 09187250 A 1997 CAPLUS
- (13) Snow Brand Milk Prod Co Ltd; EP 1010430 A 2000 CAPLUS
- (14) Stephen, A; WO 9727757 A 1997 CAPLUS

FILE 'STNGUIDE' ENTERED AT 19:14:35 ON 19 SEP 2008